

# Drinking Water State Revolving Fund

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**Annual SRF Performance Report**  
**Federal Fiscal Year 2001 and 2002 Funds**

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Prepared by  
Municipal Assistance Unit  
Office of Ecosystem Protection  
EPA New England

## Introduction

The Drinking Water State Revolving Fund funds billions of dollars of drinking water infrastructure projects nationally to protect and improve public health and attain compliance with the Safe Drinking Water Act (SDWA). Under this program, which was created by amendments to the Safe Drinking Water Act in 1996, EPA awards capitalization grants to states, which in turn provide matching funds and give low interest loans and other assistance to public water systems for infrastructure improvements. Improvements are prioritized based on public health, compliance and affordability using a priority ranking system developed by the state and submitted by EPA. As loans are repaid, additional funds for projects become available. In this manner, the DWSRF continuously revolves providing a continuous funding source which helps to ensure that our nation's water supplies remain safe and affordable.

In New England, since the inception of the program in 1997, EPA has awarded more than \$400 million in capitalization grants to our states. The NE states have successfully implemented their programs and taken advantage of both project funds and set-asides, which are DWSRF funds that can be used by the state for a variety of non-construction drinking water activities.

State Contacts	EPA NE Contacts
CT Department of Health Ray Jarema	
CT State Treasury Sharon Dixon-Peay	EPA New England Spinale.Mark@epa.gov
. . . . .	
ME Department of Human Services Roger Crouse	
ME Municipal Bond Bank Karen Asselin	EPA New England LeClair.Jackie@epa.gov
. . . . .	
MA Department of Environmental Protection Steve McCurdy	
MA Water Pollution Abatement Trust Nancy Parillo	EPA New England LeClair.Jackie@epa.gov
. . . . .	
NH Department of Environmental Services Rick Skarinka	
NH State Treasury Michael Ablowich	EPA New England Spinale.Mark@epa.gov
. . . . .	
RI Department of Health Romeo Mendes	
RI Clean Water Finance Agency Anna Coehlo	EPA New England Spinale.Mark@epa.gov
. . . . .	
VT Department of Environmental Conservation Eric Blatt	
VT Municipal Bond Bank David Minot	EPA New England LeClair.Jackie@epa.gov

The success of the DWSRF in New England depends on the efforts of our state partners, without whom the quality of drinking water and the needs of the public would be jeopardized.

This two-year report was prepared by staff of the EPA Municipal Assistance Unit and represents the best available information obtained from grant application, on-site annual reviews and data retrieved from the Drinking Water Information Management System (DWNIMS). It represents a general summary of regional activities funded with Fiscal Year 2001 and 2002 funds.

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## Grants

As stated in the introduction, EPA provides states with matching grants which are used for both infrastructure projects and other drinking water activities. During FY01 & FY02 a total of \$137,981,200 was awarded to the six New England states for their DWSRF programs.

State	FY01	FY02	Total
CT	\$7,789,100	\$8,052,500	\$15,841,600
ME	\$7,789,100	\$8,052,500	\$15,841,600
MA	\$29,985,300	\$28,787,900	\$58,773,200
NH	\$7,789,100	\$8,052,500	\$15,841,600
RI	\$7,789,100	\$8,052,500	\$15,841,600
VT	\$7,789,100	\$8,052,500	\$15,841,600

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## Project Funds

DWSRF funds are divided into two categories: project funds and set-asides. Project funds are used to provide low interest loans for infrastructure projects. The 2001 and 2002 DWSRF capitalization grants provided \$106,336,220 to the six New England states which was matched with \$27,596,240 in state funds. The program has matured since its inception in 1997 and the amount of loan repayments and interest earned on investments has grown rapidly providing an additional \$53,883,636 regionally for drinking water projects over this 2-year period. The states of Massachusetts and Connecticut have utilized their authority to leverage their funds in the municipal bond market to provide additional funds for infrastructure projects in order to meet the high

demand for loans within their state. In total, states took 78% of their FY01 funds for drinking water infrastructure projects and 76% of FY02 funds.

Grant Year	Project funds awarded	State match	Net leveraged bonds	Loan repayments & earned interest
FY01	\$53,797,631	\$13,786,160	\$123,541,829	\$21,616,081
FY02	\$52,538,589	\$13,810,080	\$26,651,931	\$32,267,555

### Set-Asides

The non-infrastructure project use of DWSRF grants is collectively referred to as "set-asides". The law allows states to use up to 31% of their grants for set-aside activities intended to promote the implementation of the SDWA such as the protection of drinking water supplies, certification of drinking water operators, and improving the technical, financial and managerial capabilities of water systems. The use of set-asides varied among our states from the FY01 and FY02 grants. Not all states took the maximum allowable amount and some reserved the right to take set-asides from future grants where allowable. **Attachments 1** and **2** depict the total set-aside percentages that states took from their DWSRF grant in FY01 and FY02. **Attachments 3(a)**

through **3(f)** show by state, set-aside activity summaries through September 30, 2002.

### Spotlight New Britain, CT Water Treatment Plant:

DWSRF funding for New Britain, CT in the amount of \$12,682,987 (phase I) and \$24,000,000 (phase II) is being used for the construction of a new water treatment plant, which would replace existing older facilities. The existing water filtration plants were built in 1940 and 1960 respectively. The new plant will ensure that the city complies with all state and federal drinking water regulations, not only as they exist now, but also well into the future as standards become even more stringent. The project will also improve operating efficiencies by using state-of-the art treatment practices.



The new water treatment plant is designed for an average daily flow rate of 14.3 million gallons (MG) and a maximum day flow of 22 MG. Treated water will be pumped from the plant to a new 4.25 MG clearwell. From the clearwell, water will flow by gravity, into the distribution system. All plant process equipment, pumps and storage will have complete back-up. Emergency power will also be provided to run the entire facility in the event of power outages. Once the new plant is completed in mid-2004, the old treatment plant will be placed off-line and demolished. This project will provide the citizens in New Britain with high quality drinking water while maintaining low rates.

**Attachments 4** through **15** illustrate the relative set-aside breakdown amount each state took from their FY-01 and FY-02 grant awards.

Many of our states continue to use set-aside funding to support additional FTEs (full time equivalents) in staffing the DWSRF program and other related drinking water programs. **Attachments 16** and **17** display the estimated FTE breakdown supporting various drinking water programs based on the FY01 and FY02 workplans submitted by the states. **Attachment 18** and **19** show the actual FTEs secured under each set-aside based on the annual reviews of the state DWSRF programs by EPA.

The use of set-aside funds is a key component for states to meet their responsibilities under the SDWA. Prior to the SDWA amendments of 1996 that created the DWSRF, the federal funding states received to implement their drinking water program was limited to Public Water System Supervision (PWSS) and sometimes groundwater grants. The DWSRF has provided states with an additional source of funding and the flexibility to direct the resources where needed for a more focused drinking water program. **Attachment 20** illustrates the combined funding now available to states and the comparative amounts provided by each program. Set-asides are separated into four broad categories described below.

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### **Administration (4%)**

A state may use up to 4% of its capitalization grant for reasonable expenses related to administering the DWSRF program. Costs such as the development of an Intended Use Plan and priority ranking system, project oversight and support services provided by other state agencies, as well as technical assistance to public water systems are eligible under this set-aside.

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### **Small System Technical Assistance (2%)**

States may use up to 2% of their grants to provide technical assistance to small water systems that serve fewer than 10,000 people. A state may use these funds to pay for staff that provide assistance to systems, or contract with an outside organization to provide technical assistance. Eligible activities under this set-aside include on-site visits for assistance with operational and management issues, planning grants, education and training on drinking water operational topics.

## State Program Management (10%)

Up to 10% of a state's capitalization grant can be used to augment and strengthen the state Drinking Water Program. Eligible uses of this setaside include activities related to the Public Water Supply Supervision (PWSS) program under which states exercise their primary enforcement authority to implement the national primary drinking water regulations; the development and implementation of operator certification and capacity development programs; and to administer a source water protection program to protect sources of drinking water from contamination.

**Spotlight Vermont:** Small systems often lack the resources to hire a professional engineer to evaluate their system. To help small systems understand the condition of their system and plan for the replacement of components, the state provides through a third party, a complete evaluation of the system from its source to distribution. Professional engineers give the water system a complete "check-up" by inventorying and evaluating the condition of the systems components, identifying any system deficiencies and estimating mitigation and/or replacement costs. The service further identifies the amount needed in an annual sinking fund to meet the identified needs.

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## Local Assistance and Other State Activities (15%)

Several other categories of activities can be funded using up to 15% of a state's DWSRF grant. Loans may be issued from this setaside for the purchase of land or easements which result in the protection of water supplies. Since the inception of this program in New England, more than 1,700 acres of land have been purchased within drinking water watersheds. Funds may also be used to provide direct assistance to systems as part of a state capacity development strategy. Under this eligibility, some of the New England states have funded facility plans, comprehensive plans, and water exploration studies. Implementation activities relative to a state Wellhead Protection Program are also eligible and have included state staff, education, small grant programs for the development of wellhead protection plans and protection activities, and assessments of the susceptibility of wells to contamination. Finally, states can use funds to issue loans for the development of source water protection programs. To date, no New England state has utilized the funds for this purpose.

**Spotlight Ipswich, MA:** The town of Ipswich, Massachusetts provides potable water to roughly 13,000 citizens with over half of the supply coming from the Dow and Bull Brook Reservoirs. Both reservoirs are classified as Outstanding Resource Waters under the Massachusetts Surface Water Quality Standards. Aware of the importance of providing a high level of water quality and the necessity of watershed protection, the town applied to Massachusetts' Source Water Supply Protection Program for a grant to develop a comprehensive Surface Water Supply Protection Plan to identify and mitigate possible sources of contamination. Primary concerns resulting from the project included insufficient vegetative buffer zones, and potential problems with manure storage. Several bylaws were proposed to improve water supply protection and water quality including a 100-foot setback from the bank of a surface water source for hitching, standing, feeding, and grazing of animals; vegetative buffers to protect individual locations identified by the study as potential sources of nutrient runoff and soil erosion; a pet waste removal bylaw which would help prevent nutrient and bacterial contamination of surface waters; and finally, a bylaw prohibiting the feeding of waterfowl because it can contribute to increased populations. Other recommendations included enforcing an existing Board of Health Regulation that prohibits stable owners from accumulating large quantities of manure and leaving it uncovered as well as installing signs to mark pet clean-up requirements, impacts waterfowl have on water quality, rules of trail systems, roadways which are located in a water supply protection area, and locations where roads first enter the watersheds. All these recommendations give the water treatment plant the support that it needs to enforce current regulations and develop new bylaws to improve the watershed security as well as water quality.



## Disadvantaged Systems Program

Under the DWSRF, states may establish separate eligibility criteria and special funding options for economically disadvantaged communities. A disadvantaged community is defined in the SDWA as "the service area of a public water system that meets affordability criteria established after public review and comment by the State in which the public water system is located." States may provide subsidies to disadvantaged systems which can include negative interest rates, principal forgiveness and extended loan terms to make a project more affordable. In New England, ME, NH and VT have all established Disadvantaged Community Programs. During the funding years 2001 and 2002, over \$10,000,000 in subsidies was given to disadvantaged systems throughout our region resulting in infrastructure improvements that would have otherwise not been possible due to the financial burden on the communities.



**Spotlight Vermont:** Vermont Water System Capacity Development Case Study  
Alburg Springs Water Company in Alburg, Vermont was a privately owned community water system serving 28 homes. The system used Lake Champlain as a water source and filtered the water using a system constructed in 1984. The annual water rates were already quite high at \$480 for permanent residents and \$340 for seasonal. The system faced operational challenges, frequent source intake line leaks resulting in total water outages, numerous monitoring and reporting violations, violations of the Surface Water Treatment Rule, operator resignations, lack of an effective management structure, and lack of financial support for much needed improvements including a new intake, filtration and disinfection facilities and repairs to the storage and distribution system. The state's Capacity Development Program, funded by DWSRF set-asides, was asked to help the system obtain technical, financial and managerial capacity and search for funding for their much-needed improvements. In response to their plea for help, the state worked with the system to create a new fire district which gave them status as a public entity and enabled them to access funding from Rural Development and the DWSRF program. The new fire district established by-laws, created a water district water board, and hired a second certified operator to give stability to their current operations and improve managerial and technical capacity. Through the diligent efforts of the State Capacity Development Program staff, the improvements to the system resulted in no increase to their current user rates and has positioned the system to maintain capacity and provide affordable drinking water for years to come.

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**Spotlight - North Haven, ME:** North Haven Water District in Maine received a loan in the amount of \$1,978,000 of which \$1,483,500 in principal was forgiven to treat an unfiltered surface water supply. The project involved the construction of a slow sand filter, installation of ozone and chlorination for disinfection, and limestone for corrosion control. The median household income of this community was \$24,375 qualifying them for participation in the State's Disadvantaged Community Program. Due to the low income in the area and the large operating costs associated with the finished project, funds were loaned at 0% interest for a term of 30 years in addition to a \$1,483,500 subsidy. To further round out the funding package and make it even more affordable, USDA's Rural Development program contributed \$214,500 toward the project.





## Drinking Water Infrastructure Grants Tribal Setaside Program

Each year, the SDWA reserves national set-asides from DWSRF funds for tribal infrastructure projects. Funds are allotted to each region and disbursed as grants to tribes for drinking water projects based on a priority ranking system developed by a regional workgroup consisting of Tribes, EPA and Indian Health Service. The following table depicts funds allotted through FY-02 for this program.

EPA has cooperatively funded tribal projects with additional financial assistance from USDA's Rural Development Program and the Indian Health Service (IHS). In addition to cofunding infrastructure projects with EPA, IHS also provides engineering, construction oversight, and project administration services to tribes that request this assistance.

The following projects were funded with FY01 and FY02 funds which totaled \$543,400:

FY	Allotment
1997	\$409,600
1998	\$232,900
1999	\$246,300
2000	\$275,000
2001	\$267,100
2002	\$276,300
Total	\$1,707,200

- Passamaquoddy Tribe at Indian Township  
New well and rehabilitation of pumphouse. Replacement of old hydrants at risk for cross-connection and distribution system leaks.
- Passamaquoddy Tribe at Pleasant Point  
Water main looping to mitigate dead-ends. Booster chlorination facility.
- Penobscot Indian Nation  
Water main looping to mitigate dead-ends. Water main replacements and distribution system improvements.

## Web Sites

### **EPA New England**

Home Page

<http://www.epa.gov/ne>

Drinking Water SRF

<http://www.epa.gov/ne/eco/drinkwater/dwsrf.html>

Drinking Water

<http://www.epa.gov/ne/eco/drinkwater>

Clean Water SRF

<http://www.epa.gov/ne/cwsrf/index.html>

### **New England States**

Connecticut

<http://dep.state.ct.us/wtr/cwa/cwfund.htm>

Massachusetts

<http://www.state.ma.us/dep/brp/mf/dwsrf.htm>

Maine

<http://www.state.me.us/dhs/eng/water/srf.htm>

<http://www.mainebondbank.com/Drinking Water.htm>

New Hampshire

<http://www.des.state.nh.us/wseb/newsletter/Spring2003.asp?theLink=DWSRF>

Rhode Island

<http://www.ricwf.state.ri.us/dwsrf.html>

<http://www.healthri.org/environment/dwq/loanfund.htm>

Vermont

<http://www.vermontdrinkingwater.org/capacity.htm>